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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,813	03/02/2000	Eric Raust	35452-12980	5391

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EXAMINER	
CORSARO, NICK	
ART UNIT	PAPER NUMBER
2684	4

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/517,813	Applicant(s) RAUST ET AL.	
	Examiner Nick Corsaro	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 March 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 March 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s): _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolcott et al. (6,317,583) in view of Zhao et al. (6,332,069).

Consider claim 1, Wolcott discloses a method of communication between earth terminals and satellites (see col. 1 lines 22-27). Wolcott discloses providing a plurality of satellites, each satellite having at least one receiver tunable to a selected frequency (see col. 2 lines 1-8). Wolcott discloses providing a plurality of earth terminals adapted to send messages to, and receive messages from, the plurality of satellites (see col. 2 lines 1-40). Wolcott discloses defining at least one sub band of the frequency spectrum; assigning at least one sub band to each satellite receiver; assigning each earth terminal to one of the satellite receivers; selecting a center frequency for the communication channel for each receiver within the sub band assigned to that receiver; tuning each satellite receiver to the communication channel selected for that receiver (see col. 2 lines 1-40). Wolcott does not specifically disclose informing at least the listening earth terminals of the communication channel selected for the receiver to which each earth terminal is assigned; transmitting messages from the earth terminals to the respective, assigned satellite receivers at the selected communication channel for each receiver. Zhao teaches informing at least the listening earth terminals of the communication channel selected for the

receiver to which each earth terminal is assigned; transmitting messages from the earth terminals to the respective, assigned satellite receivers at the selected communication channel for each receiver (see col. 1 lines 65-67 and col. 2 lines 1-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wolcott, and inform at least the listening earth terminals of the communication channel selected for the receiver to which each earth terminal is assigned; transmitting messages from the earth terminals to the respective, assigned satellite receivers at the selected communication channel for each receiver, as taught by Zhao, thus allocating a terminal a communication channel when desired by the user of the terminals.

Consider claims 2 and 3 Wolcott discloses providing step comprises providing a plurality of satellites, each satellite having at least one receiver tunable to a selected frequency and at least one satellite having a plurality of receivers, each receiver being tunable to a selected frequency (see col. 2 lines 1-67, and col. 3 lines 1-56).

Consider claims 4-10, Wolcott discloses defining the sub bands (see col. 3 lines 35-67, col. 4 lines 1-38, col. 12 lines 30-67, and col. 13 lines 1-67).

Consider claims 11-26, Wolcott discloses sub band definition and changing the sub bands based on changing the gateway to associated area (see col. 14 lines 5-26). Wolcott does not specifically disclose changing according burst transmission and slot assignment. Zhao teaches changing according burst transmission and slot assignment (see col. 8 lines 30-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Wolcott, and change the sub bands based on burst and slot assignment, as taught by Zhao, thus accommodating communications when call blocking occurs.

3. Claims 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koraitim et al. (6,370,117) in view of Wolcott et al. (6,317,583).

Consider claims 27, 32, and 35 Koraitim discloses a method of communication between earth terminals and at least one satellite (see col. 1 lines 5-13). Koraitim discloses providing at least one satellite, each satellite inherently if not obviously having at least one receiver (see col. 1 lines 1-27). Koraitim discloses each receiver being configured to receive messages having a size of one of a plurality of sizes (see col. 5 lines 10-55). Koraitim discloses providing a plurality of earth terminals adapted to send messages to, and receive messages from, the at least one satellite (see col. 1 lines 1-67). Koraitim discloses tracking the load of messages on each receiver; and reconfiguring at least one receiver to receive messages having a different one of the plurality of sizes in response to the message load (see col. 5 lines 10-53 and col. 6 lines 20-56). Koraitim does not specifically disclose each satellite having a receiver. Wolcott discloses a receiver (see col. 2 lines 1-12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Koraitim, and have a receiver, as taught by Wolcott, thus allowing duplex communications on the satellite.

Consider claims 28-31, 33-34, and 36, Koraitim discloses transceiving variable messages sizes, however does not specifically disclose changing the sub bands bases on load. Wolcott teaches changing the sub bands based on load (see col. 2 lines 1-54, col. 12 lines 30-67, and col. 13 lines 1-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Koraitim, and change the sub bands based on load, as taught by Wolcott, thus allowing and adjustment of the number of assigned frequencies long with time slots to compensate for changing load.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,188,896) Perahia teaches sub banding.

2. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

Nick Corsaro

Nick Corsaro